

my approach. I followed, and soon got a good view of one silhouetted against the sky, as it sat in the top of a fir. The bird was evidently watching my approach, and its ear tufts could be plainly seen. From their position, rising from the center of the head, rather than the sides, as well as from the size of the bird, I felt sure that it was a Long-eared Owl. I believe that the birds were a family containing both adults and young, and that they had been attracted by the light of our camp fire. This is the third time that I have known these Owls to be attracted by the light of a camp fire in the mountains of Montana.—ARETAS A. SAUNDERS, *Norwalk, Conn.*

**The Short-eared Owl Breeding on Nantucket.**—In 'The Auk' for January, 1919, Mr. Francis H. Allen, reporting the occurrence of the Short-eared Owl (*Asio flammeus*) at Nantucket in August, 1918, speaks of the somewhat doubtful status of this Owl as a breeding bird in Massachusetts, and quotes the opinion of Mr. George H. Mackay that at one time it doubtless bred quite regularly on Nantucket and more rarely on Muskeget Island.

There is, I think, good reason to believe that this Owl has nested on Nantucket in recent years not less regularly than in the past. In the years 1908 to 1912 when, in the month of June, I explored the island intent on its plants, but always with a side eye to birds, the Short-eared Owl was frequently met with, this and the Marsh Hawk appearing to be the only raptorial birds of the island at that season. In 1912 it was more numerous than at any time before, or else chance made it so appear, and between June 27 and July 14 not less than twelve were observed. On June 10, 1908, a nest containing two eggs, evidently fresh, was found in Trot's swamp on the western side of the island. The locality was a dryish open part of the swamp less than an acre in extent hemmed about on all sides by thickets that were in many places swampy and impassable. The nest, a slight structure of grasses and other light material, was set in a cluster of hay-scented fern (*Dennstaedtia punctilobula*) whose delicate fronds rising around the margin of the nest gave less protection than concealment and, indeed, little concealment from above, for down within the encircling ferns the eggs were in open view. At this spot the ground was slightly raised above the level of the swamp, and the unrestrained growth of this fern attested that here, even in a wet season, the soil must be free from saturation. The sitting bird left the nest at my near approach, when its mate almost immediately appeared, both birds ranging widely about well in the air at no time coming very near and, at intervals, almost pausing in their flight directly overhead. One or both birds continually repeated a weak and expressionless guttural note — as memory now recalls it. The eggs, measured at the nest and replaced, were 1.37 and 1.44 inches in length — small for the species according to published measurements.

South of Nantucket the Short-eared Owl has not often been reported in its breeding season. There are several records of its having nested

along the New Jersey coast, even as far south as the Cape May region, but I do not know that it has ever been found breeding on Long Island. There would seem to be little doubt, however, that it has recently nested there at Long Beach. At that place, on May 25, 1917, I watched a pair of these owls, evidently, from the disparity in their size, a male and female, repeatedly attacking a single Crow. The birds were flying about over a tract of dunes and thickets flanking a salt marsh inaccessible to me across a broad creek. The Crow, perhaps to escape the Owls, perhaps intent on depredation of their nest, several times swept down to the ground about a certain spot, the Owls pursuing it or awaiting its return into the air when attack and counter-attack were renewed. The following year at the same place a pair were observed on February 22, attacking a Marsh Hawk, one was seen on April 12, a pair on May 17, and again a single one on August 9.—EUGENE P. BICKNELL, *New York City*.

**Early Occurrence of the Snowy Owl and the Pine Grosbeak in Monroe County, New York.**—On November 3, 1918, while riding on a trolley car toward the lake, my attention was called by the motorman, to a large Snowy Owl (*Nyctea nyctea*) which was sitting on the top of a wooden pole in a gravel bed and about 150 feet from the tracks.

He also informed me that the bird had been in the same place while on a previous trip an hour and a half before. Later it was seen to fly into a nearby vineyard. The locality was in the town of Irondequoit, a mile and a half from Lake Ontario. On the same afternoon at 3.30 o'clock, while walking along the border of the woods at Durand-Eastman Park, near the lake, I observed three Pine Grosbeaks (*Pinicola enucleator leucura*). There were two females and one male, they were feeding in some bushes close to the roadway and were very tame, allowing me to approach within ten feet of them, when they would fly into the nearby bushes. This is the earliest record that I can find of their occurrence in Monroe County.—LUCIUS H. PAUL, *Rochester, N. Y.*

**The Deep Plantar Tendons in the Puff-birds, Jacamars and their Allies.**—One of the most distinct and peculiar types of the deep plantar tendons in birds is that known as the *antiopelmous*, characterizing certain zygodactyl groups such as the Woodpeckers, Toucans and their allies. In this arrangement of the simple *flexor perforans digitorum* runs to the third toe, while the trifurcate *flexor longus hallucis* supplies the first, second and fourth toes. The two tendons are connected by a vinculum which runs from the *flexor longus* to the *flexor perforans*.

The nature of these tendons in the Puff-birds (*Bucconidae*) and Jacamars (*Galbulidae*) is of special importance in determining the systematic position of these families. Both are commonly given as antiopelmous, perhaps on the sole authority of Garrod (cf. *P. Z. S.*, 1875, p. 345; also Selater's Monograph of the Jacamars and Puff-birds, p. XXVII). The following species were examined by Garrod: *Galbula rufoviridis*, *G. albirostris*, and